

# **AS-BUILT PLANS/RECORD DRAWINGS CHECKLIST**

City of Flagstaff Public Improvements
April 27, 2015

Project Nan	ne:
Project No.:	
Date:	
All itams lista	d below shall be provided on As-Builts/Record Drawings unless identified with N/A.
<u>Generai (ap</u>	plies to entire plan set)
	As-Builts/Record Drawings plan set shall contain all sheets from the approved design/construction plan set (cover sheet to last sheet including details).
	As-Builts/Record Drawings shall contain all horizontal and vertical design information, sizes, thicknesses, and material types of improvements shown on the design/construction plan set (even if unchanged during construction).
	All plan sheets shall have an Engineer seal per B.T.R. rules.
	If the As-Built Engineer is different from the Design Engineer, provide the As-Built Engineer contact info on cover sheet.
	Place "As-Built" or "Record Drawing" lettering and date in lower right hand corner of all sheets.
	Improvements deleted in the field shall be crossed out with an "x" and labeled "not built".
	Improvements changed from the approved design plans shall be reflected and clearly called out by "clouding".
	Plan sheets that represent improvements that were not changed from the approved design plans shall have "Per Plan" placed in the lower right hand corner.
Sanitary Sev	wer Plans
	Improvements built exactly per design plan shall have the elevations/stations noted within parenthesis and marked "AB".
	Stations for all manholes, cleanouts, services and lateral stub-outs.
	Manhole pipe invert elevations (in and out) and manhole rim elevations shall be determined by field surveying.
	Pipe lengths indicated on both plan and profile.
	Recalculate longitudinal pipe slopes for all pipe segments. (All measurements to MH Centers)

	Stations and length of pipe encasements/extra protection.
	Anode locations and tracer wire connection stations and cross ties to two permanent structures.
Wate	· <u>Plans</u>
	Stations of all water services including landscape and fire lines.
	Stations of all fire hydrants.
	Stations of all valve boxes, blow-offs, and air release valves.
	Stations of all bends, tees, and bell restraints.
	Profile view of all pipeline vertical alignments, including stations of all fittings, depth to finish grade, and pipe separation dimensions.
	Stations and length of pipe encasements/extra protection.
	<ul><li>Horizontal cross ties to two permanent structures (fire hydrants, light poles &amp; ID #, power poles &amp; ID #, etc.) for all valve boxes.</li></ul>
	Anode locations and tracer wire connection stations and cross ties to two permanent structures.
<u>Drain</u>	age Plans
	Inverts for storm sewer pipes at inlets and manholes shall be determined by field surveying.
	Recalculate longitudinal pipe slopes for all pipe segments.
Stree!	:/Trail Plans
	Stations of all survey monuments.
	Sleeve/conduit/casing types, sizes, locations and stations.
	Provide spot elevations at intersections as well as pavement and curb every 500 ft.
Stree	: Lights and Traffic Signal Plans
	Stations for all street illumination lights.
	Locations of all traffic signal poles, cabinets, J-boxes and related conduits.
	Abandonment of existing conduits and facilities.
	Location of signage related to traffic signal.
<u>Misce</u>	<u>llaneous</u>
	Major unexpected dry utility crossings of water and sewer mains
	Unforeseen underground structures exposed during water and sewer main construction such as vaults
	Major constructed dry utilities

## Section 13-06-002-0008 As-built Plans

#### A. Definition

When referred to in these Standards, the terms "as-built plans" mean as-builts, as-constructed, or record drawings.

#### B. Intent

Prior to the City's final approval of any public improvement or the final acceptance of any public utilities, which the City may accept currently or in the future for maintenance and operation, as-built plans must be submitted to the City for review and acceptance.

#### C. Procedure

- All as-builts shall have an applicant transmittal attached as documentation of who is submitting them. This is necessary in order
  to process the plans and for contact information when the review is complete. Plans will not be reviewed if this documentation is
  missing and/or the submittal is deemed to be incomplete based on the checklist.
- 2. All as-built plans submitted for review shall consist of two (2) clean blue or black line paper sets (copied from the original mylars, not a permit set), containing all the original signatures. One (1) set will be reviewed and returned if there are City comments. All comments must be addressed. Two (2) revised plan sets will be required with each re-submittal along with the previous redlined review set until final City approval.
- 3. Upon City approval, one (1) set of Mylars shall be submitted to the City for permanent record. If the project is developed in phases, as-built information/plans will be submitted once the work is complete in that phase.

## D. Criteria

As-built drawings shall contain, but are not limited to, the following information:

- 1. The plans shall contain the type and detail of information shown on the approved construction plans.
- 2. All public improvements (Water, Sanitary Sewer, Storm Sewer, and Streets) shall be as-built. For a list of all required items see the "As-Built" checklist available from the City Engineer or his authorized representative.
- 3. As-built drawings shall be created using computer aided drafting (CAD) computer software.
- All as-built survey data shall tie into the same site benchmarks as those used for the construction plans.

## E. Certification

All as-built plans shall contain a statement by a licensed professional engineer who is currently registered in the State of Arizona certifying the drawings to be as-built. All plans must also contain the seal and signature of said registered professional.